### **SYSTEMS ANALYST**

### DISTINGUISHING FEATURES OF THE CLASS:

This is a high level position responsible for the technical development of a project. Responsibilities may include system design, technology evaluations, applications development, database specifications, user output specifications, documentation, and the determination of the necessary programming tools to meet user needs. Incumbents have a great deal of contact with users in identifying and designing system requirements. The class differs from Programmer/Analyst in that the work focuses on complex systems analysis and application design rather than a balance of systems analysis and programming. In smaller data centers the incumbent functions as a project leader while in larger centers work would be performed under the general supervision of a Project Leader or other higher level technical supervisor. Supervision of others is normally a function of the position.

# **TYPICAL WORK ACTIVITIES:**

Typical work activities for incumbents in this title include those listed below in addition to those work activities performed by lower level titles in this series. They are indicative of the level and types of activities performed by incumbents in this title. They are not meant to be all inclusive and do not preclude a supervisor from assigning activities not listed which could reasonably be expected to be performed by an employee in this title.

- 1. Confers with client departments to ascertain system requirements such as functional and data specifications, format of reports, and methods of data transfer between user departments and processing units;
- 2. Researches new technologies to determine how they can be incorporated into systems;
- 3. Analyzes data in order to develop and modify programs and system flow;
- 4. Designs, develops and tests applications;
- 5. Specifies logic to client departments to be incorporated into a system;
- 6. Provides technical assistance and direction to project staff including network issues and platform dependent technical issues;
- 7. Assists subordinate staff in overall system design and programming techniques;
- 8. Evaluates operational systems; recommends improvements and modifications;
- 9. Consults with client departments in all phases of system development;
- 10. Develops programs and integrates desktop tools to meet client needs;
- 11. Applies current technology including network and platform dependent issues to problem solution;
- 12. Functions as user liaison during project development.

## FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of the principles and practices of systems analysis, organization and management analysis, project management governance, forms and records management and methods sufficient to lead in the design, testing and maintenance of programs on a variety of platforms to meet client needs;

Knowledge of the current principles, practices, methods, techniques and capabilities of various computer technologies, including networking, security, storage, and database and memory management;

Knowledge of the current principles, practices, methods, capabilities and techniques of high speed electronic data processing in order to develop and maintain programs in a client / server or web environment;

Knowledge of windows and browser-based object oriented programming languages sufficient to analyze existing programs, design new applications and integrate applications within the system;

Knowledge of integrated development environments, such as Visual Studio and related tools;

Knowledge of relational database concepts and programming languages, including SQL;

## SYSTEMS ANALYST (Cont'd)

### FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (Cont'd)

Ability to keep current with technological advances and other changes in the field;

Ability to present ideas clearly and concisely, both orally and in writing;

Ability to establish and maintain effective working relationships with departmental staff and user departments, including the ability to understand and meet the user's needs;

Personal characteristics necessary to perform the duties of the position;

Physical condition commensurate with the demands of the position.

# **MINIMUM QUALIFICATIONS:**

Graduation from high school or possession of a high school equivalency diploma AND:

EITHER: (A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's degree in computer science or a related field AND three (3) years of full time paid work experience as a Programmer / Analyst directly developing business or governmental applications (i.e., payroll, accounts receivable, accounts payable, ledger, inventory, case management, etc.), which primarily involved programming in windows-based or web-based programming languages such as Visual Basic;

OR: (B) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in computer science or a related field AND five (5) years of full time paid work experience as described in (A) above:

OR: (C) An equivalent combination of education and experience as indicated in (A) and (B) above.

## **SPECIAL REQUIREMENT:**

An appointing authority may require the possession of a New York State Driver License at time of appointment.

DP0208

REVISED: 08/02/73 06/13/79 04/25/80 04/10/85 01/26/87

10/17/89 07/01/91 07/06/94 02/01/99 03/12/01

05/08/01 11/28/16